

## REMARKS

In the Office Action mailed May 30, 2006, the Examiner rejected claims 1-6, 8, 9 and 11-23. Applicants traverse those rejections with specificity below.

### I. Rejection under 35 USC 102/103

The Office Action rejected claims 1-6, 8, 9 and 11-23 as being anticipated by or obvious in view of one or more of the following references: Winckler et al. (US Patent No. 6,420,047); Gallucci et al (US Patent No. 5,596,049); Ladang et al (US 2002/0153633); and Tickart et al (US 2002/0082350). Applicants traverse those rejections. Applicant presented arguments previously and those arguments are incorporated by reference herein. Applicants specifically argue the patentability of certain claims and certain combinations below.

#### The Law

The MPEP sec. 2131 quotes Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053, (Fed. Cir. 1987) as reading, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

The MPEP 2143.03 reads, "To establish prima facie obviousness...all the claim limitations must be taught or suggested by the prior art." In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, the MPEP states that, "All words in a claim must be considered in judging the patentability of that claim again the prior art." In re Wilson, 424 F2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

The Court of Appeals for the Federal Circuit, in the case of In re Lee, 61 USPQ2d 1430 (CAFC 2002), wrote:

The factual inquiry whether to combine references must be thorough and searching." Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot

be dispensed with. See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding'") (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.");...

The need for specificity pervades this authority. See, e.g., In re Kolzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

### Claims 1 and 18

The Office Action suggests, at page 11 thereof, that Applicants' arguments with respect to the "cross-linked matrix" are not persuasive because, "Winkler et al. teach using surfactants containing glycerin and sugar moieties as a polar group to be used to introduce branching and cross-linking in the final polymer". While Applicants acknowledge such a teaching in Winckler et al, Applicants contend that this teaching suggests, at best, simple cross-linking within a blend material that is thermoplastic rather than the formation of a cross-linked matrix as recited in claims 1 and 18. This is particularly the case since Winckler et al. consistently discusses the formation and/or processing of thermoplastics that can be melted, solidified and subsequently remelted. However, such reprocessing is not in the nature of a cross-linked matrix such

as the one recited in claims 1 and 18. Thus, Applicants contend that Winckler et al. does not anticipate claims 1 and 18 and Applicants request that rejection of these claims be withdrawn.

Claim 2

The Office Action admits, at page 8, that Winkler "does not teach the use of a linking agent selected from a diepoxy resin, a diepoxide, a diisocyanate, a diester or a combination thereof". The Office Action then, in rejecting claim 2, uses Galluci to suggest that, "it would have been obvious to one of ordinary skill in the art at the time of the invention to use Gallucci's teaching of reinforcing polyesters with diepoxy in Winckler's molding compound in order to exhibit vastly superior melt viscosity..." However, this suggestion by the Office Action is misguided because it does not view claims 2 "as a whole" and does not provide a proper motivation for the combination of references.

Galluci, at best, teaches the use of an epoxy to assist in forming thermoplastic materials (e.g., as a chain extender). This becomes clear from an examination of the application, and particularly from an examination of the examples (see col. 8, lines 30-40), which discussing process (i.e., extruding, drying and molding) that in Galluci requires melting, drying and remelting of the materials. However, as discussed above, claim 1, from which claim 2 depends, recites a cross-linked matrix where the linking agent, which is selected in claim 2 *inter alia* from diepoxide, couples chains of the block copolymer together. In contrast, the epoxy of Galluci appear to be used as a chain extender in the formation of thermoplastic materials. The epoxy of Galluci is not used within a step that involves the formation of a cross-linked network. Moreover, as discussed above, thermoplastic reprocessing is not in the nature of a cross-linked matrix such as the one recited in claim 2.

It is also noteworthy that the motivation cited by the Office Action for the combination of Galluci with Winckler is improvement of melt viscosity. Such an improvement may be particularly advantageous for thermoplastic materials such as those in Galluci, however, it is less of a consideration and possibly no consideration at all for a sheet molding compound that is mixed and is then heated to form a

cross-linked matrix. As such, Applicants request that rejection of claim 2 be withdrawn.

Claim 23

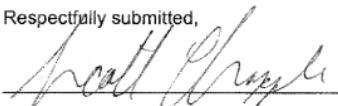
Applicants also traverse the rejection of claim 23. In particular claim 23 is dependent upon claim 22, which is dependent upon claim 21, which is dependent upon claim 1. Accordingly, claim 23 recites a reactive admixture that includes a styrene monomer, an unsaturated polyester and a polybutylene terephthalate as the macrocyclic oligoester wherein styrene, methyl methacrylate and vinyl ester are copolymerized to form the cross-linked matrix and the macrocyclic oligoester is reacted into the matrix. The Office Action has not shown the prior art to remotely suggest such a combination as a reactive admixture and, further, has not shown the prior to remotely suggest such a reactive admixture to copolymerize styrene, methyl, methacrylate and vinyl ester to form the matrix with the macrocyclic oligoester (i.e., polybutylene terephthalate) in the matrix. Accordingly, Applicants request that the rejection of claim 23 be withdrawn.

### **CONCLUSIONS**

In view of Applicants' remarks, the Examiner's rejections are believed to be rendered moot. Accordingly, Applicants submit that the present application is in condition for allowance and requests that the Examiner pass the case to issue at the earliest convenience. Should the Examiner have any question or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (248) 292-2920.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 04-1512 for any fee which may be due.

Respectfully submitted,



Scott Chapple  
Registration No. 46,287  
DOBRUSIN & THENNISCH PC  
29 W. Lawrence Street  
Suite 210  
Pontiac, MI 48342  
(248) 292-2920

Customer No. 25215